

# MYCOLOGICAL LITERATURE ON TEXAS FLESHY BASIDIOMYCOTA, TWO NEW COMBINATIONS, AND NEW FUNGAL RECORDS FOR TEXAS

David P. Lewis

262 CR 3062  
Newton, Texas 75966, U.S.A.  
[pglewis@jas.net](mailto:pglewis@jas.net)

Clark L. Ovrebo

Department of Biology  
University of Central Oklahoma  
Edmond, Oklahoma 73034, U.S.A.  
[covrebo@uco.edu](mailto:covrebo@uco.edu)

## ABSTRACT

An extensive literature search was made to determine all published articles and new species or infraspecific taxa of fleshy basidiomycetous fungi described from Texas. This search resulted in 202 articles on Texas fungi with 89 new taxa described from Texas. We also report on 52 new records of fleshy basidiomycetous fungi from Texas and propose two new combinations, **Hygrocybe chamaeleon** and **Hygrocybe mississippiensis**.

## RESUMEN

Se realizó una búsqueda extensa de todos los artículos publicados, de las especies nuevas, o taxa infraespecíficos de los hongos carnosos basidiomicetos descritos para Texas. Esta búsqueda dio como resultado 202 artículos relacionados con hongos en los que se describen 89 nuevos taxa para Texas por primera vez. También, reportamos aquí 52 nuevas especies de hongos carnosos basidiomicetos para Texas, y a la vez proponemos dos nuevas combinaciones **Hygrocybe chamaeleon** e **Hygrocybe mississippiensis**.

## PART I—MYCOLOGICAL LITERATURE ON TEXAS FLESHY BASIDIOMYCOTA

David Lewis has been collecting fungi in southeast Texas for over 30 years. During this time he has attempted to amass the literature that documents the fleshy Basidiomycota throughout Texas. Reported here are the results of the literature search as conducted by both authors. The authors' primary research interests center around gilled mushrooms and boletes (Agaricales sensu lato – but see Part III of this paper for a newer classification) so perhaps the list below is most complete for the fungi of these groups. We have, however, attempted to locate references for other fleshy basidiomycetous fungi.

For a reference to be included in the list, a collection must be cited from Texas. For modern references this is not difficult to discern because of the exacting requirements of locality information and herbarium designations. Publications that give the distribution as "as far as Texas" or something similar without documentation of collections are not included. A little more liberty is yielded to the literature of the nineteenth or early twentieth centuries where geographic information might not be as complete, nor is there a guarantee that a herbarium specimen exists.

Following each reference is a number in parenthesis. The number indicates how many species, with at least one Texas record, are reported in the article. For taxa that have the holotype from Texas, the binomials and localities (sometimes only the state name was given in the protologue) where collected are provided beneath the references, followed by the herbarium location of the holotype. We have relied on literature references and online herbaria data to determine the location of the holotypes, but we have not confirmed their continued existence in the designated herbaria. For a few of the older taxa we were not able to determine the location of the types. We are aware that a number of the newly described taxa have since been nomenclaturally or taxonomically synonymized, but we feel that for the purposes of this paper it is best to give only the basionym as the starting reference.

## RESULTS

Abraham, S.P. and A. Loeblich. 1995. *Gymnopilus palmicola*, a lignicolous Basidiomycetes growing on adventitious roots of palm (*Sabal palmetto*) in Texas. *Principes* 39:84–88. (1)

Adaskaveg, J.E. and R.L. Gilbertson. 1988. *Ganoderma meredithae*, a new species on pines in the southeastern United States. *Mycotaxon* 31:251–257. (1)

Ammirati, J.F. and H.E. Bigelow. 1984. *Cortinarius iodes* versus *Cortinarius heliotropicus*. *Mycotaxon* 30:461–472. (1)

Ammirati, J.F. and A.H. Smith. 1984. *Cortinarius* II: A preliminary treatment of species in the subgenus *Dermocybe*, section *Sanguinei*, in North America, North of Mexico. *McIlvainea* 6:54–64. (1)

Atkinson, G.F. Three new genera of the higher fungi. *Bot. Gaz.* 34:36–43. (1)  
*Dictybole* Atkinson gen. nov and *Dictybole texensis* Atkinson & Long sp. nov. (HOLOTYPE: TEXAS. Denton Co.: Denton)

Baroni, T.J., A.E. Bessette, and W.C. Roody. 1998. *Boletus patrioticus*—A new species from the eastern United States. *Bull. Buffalo Soc. Nat. Sci.* 36:265–268. (1)

Bas, C. 1969. Morphology and subdivision of *Amanita* and a monograph of its section *Lepidella*. *Persoonia* 5:285–579. (3)  
*Amanita silvifuga* Bas (HOLOTYPE: TEXAS. College Station; MICH)

Berkeley, M.J. 1845. Decades of Fungi VIII-X, Australian and North American Fungi. *London J. Bot.* 4:308. (1)  
*Scleroderma texense* Berk. (HOLOTYPE: TEXAS; K)

Berkeley, M.J. 1872. Notices of North American fungi. *Grevillea* 1:33–39. (3)

Berkeley, M.J. 1872. Notices of North American fungi. *Grevillea* 1:49–55. (3)  
*Polyporus lindheimeri* Berk. & M.A. Curtis (HOLOTYPE: TEXAS; K)

Berkeley, M.J. 1872. Notices of North American fungi. *Grevillea* 1:65–71. (3)  
*Merulius wrightii* Berk. (HOLOTYPE: TEXAS; K)  
*Trametes lindheimeri* Berk. & M.A. Curtis (HOLOTYPE: TEXAS)

Berkeley, M.J. 1873. Notices of North American fungi. *Grevillea* 1:97–102. (1)

Berkeley, M.J. 1873. Notices of North American fungi. *Grevillea* 1:145–150. (2)

Berkeley, M.J. 1873. Notices of North American fungi. *Grevillea* 1:161–166. (1)  
*Stereum dissitum* Berk. (HOLOTYPE: TEXAS; K)

Berkeley, M.J. 1873. Notices of North American fungi. *Grevillea* 1:177–180. (1)

Berkeley, M.J. 1873. Notices of North American fungi. *Grevillea* 2:3–7. (1)

Berkeley, M.J. 1873. Notices of North American fungi. *Grevillea* 2:33–35. (2)  
*Secotium texense* Berk. & M.A. Curtis (HOLOTYPE: TEXAS; BPI)

Berkeley, M.J. 1873. Notices of North American fungi. *Grevillea* 2:49–53. (4)  
*Bovista stuppea* Berk. (HOLOTYPE: TEXAS)

Berkeley, M.J. and M.A. Curtis. 1853. Centuries of North America fungi. *Ann. Mag. Nat. Hist.* II, 2:417–435. (1)  
*Collybia texensis* Berk. & M.A. Curtis (HOLOTYPE: TEXAS; K, FH)

Bessette, A., A. Bessette, D.P. Lewis, and S. Metzler. 1993. A new substrate for *Strobilurus conigenoides* (Ellis) Singer. *Mycotaxon* 48:299–300. (1)

Bigelow, H.E. 1977. A new *Clitocybe* from Texas. *Mycologia* 69:1047–1049. (1)  
*Clitocybe texensis* Bigelow (HOLOTYPE: TEXAS. Eastland Co.: Cisco; MICH)

Bigelow, H.E. 1982. North American species of *Clitocybe*. Part I. Beih. *Nova Hedwigia* 72:1–280. (2)

Bigelow, H.E. 1982. North American species of *Clitocybe*. Part II. Beih. *Nova Hedwigia* 81:281–471. (2)

Both, E.E. 1993. The boletes of North America—a compendium. Buffalo Museum of Science, Buffalo. 436 p. (12)

Both, E.E. 1998. New taxa of boletes and two boletes with identity problems. *Bull. Buffalo Soc. Nat. Sci.* 36:215–232. (1)  
*Pulveroboletus lewisii* Singer (HOLOTYPE: TEXAS. Orange Co.: Vidor; BUF)

Burdsall H.H. and F.F. Lombard. 1976. The genus *Gloeodontia* in North America. *Mem. New York Bot. Gard.* 28:16–31. (1)

Burdsall, H.H. and K.K. Nakasone. 1981. New or little known lignicolous Aphylophorales (Basidiomycotina) from the southeastern United States. *Mycologia* 73:454–476. (1)

Burt, E.A. 1914. The Thelephoraceae of North America. I. *Ann. Missouri Bot. Gard.* 1:185–228. (1)

Burt, E.A. 1914. The Thelephoraceae of North America. III. *Craterellus borealis* and *Cyphella*. *Ann. Missouri Bot. Gard.* 1:357–382. (2)

Burt, E.A. 1915. The Thelephoraceae of North America. V. *Tremelloendron*, *Eichleriella*, and *Sebacina*. *Ann. Missouri Bot. Gard.* 2:731–770. (2)  
*Eichleriella schrenkii* Burt (HOLOTYPE: TEXAS. Bexar Co.: San Antonio)

Burt, E.A. 1917. *Merulius* in North America. *Ann. Missouri Bot. Gard.* 4:305–362. (5)

Burt, E.A. 1917. The Thelephoraceae of North America. VIII. *Coniophora*. *Ann. Missouri Bot. Gard.* 4:237–269. (1)

Burt, E.A. 1918. The Thelephoraceae of North America. IX. *Aleurodiscus*. *Ann. Missouri Bot. Gard.* 5:177–203. (2)

Burt, E.A. 1918. The Thelephoraceae of North America. X. *Hymenochaete*. *Ann. Missouri Bot. Gard.* 5:301–372. (2)

Burt, E.A. 1920. The Thelephoraceae of North America. XII. *Stereum*. *Ann. Missouri Bot. Gard.* 7:81–248. (10)

Burt, E.A. 1925. The Thelephoraceae of North America. XIV. *Peniophora*. *Ann. Missouri Bot. Gard.* 12:213–357. (8)  
*Peniophora asperipilata* Burt (HOLOTYPE: TEXAS. Harris Co.: BPI)

*Peniophora taxodii* Burt (HOLOTYPE: TEXAS. Jefferson Co.: Beaumont)

*Peniophora texana* Burt (HOLOTYPE: TEXAS. Travis Co.: Austin; BPI)

Burt, E.A. 1926. The Thelephoraceae of North America. XV. *Corticium*. *Ann. Missouri Bot. Gard.* 13:173–354. (10)

Buyck, B. 1998. Une révision critique de la sect. *Archaeinae* (*Russula*, Russulales). *Belgium J. Bot.* 131:116–126. (1)

Buyck, B. 2004. Short diagnoses and descriptions for some exotic *Russula* (Basidiomycotina). *Cryptogam. Mycol.* 25:181–182. (1)  
*Russula lewistii* Buyck (HOLOTYPE: TEXAS. Newton Co.: Mayflower; PC)

Buyck, B. and R.E. Halling. 2004. Two new *Quercus*–associated Russulas from Costa Rica and their relation to some very rare North American species. *Cryptogam. Mycol.* 25:3–13. (1)

Buyck, B. and D. Mitchell. 2003. *Russula lentiginosa* spec. nov. from West Virginia, USA: a probable link between tropical and temperate Russula-groups. *Cryptogam. Mycol.* 24:317–325. (1)

Buyck, B., R.E. Halling and G.M. Mueller. 2003. The inventory of *Russula* in Costa Rica: discovery of two very rare North American species in montane oak forest. *Bol. Grupp. Micol. G. Bresadola-Nuov. Ser.* 46:57–74. (1)

Buyck, B., D. Mitchell, and J. Parrent. 2006. *Russula parvovirescens* sp. nov., a common but ignored species in the eastern United States. *Mycologia* 98:612–615. (1)

Buyck, B., V. Hofstetter, U. Eberhardt, A. Verbeken, and F. Kauff. 2008. Walking the thin line between *Russula* and *Lactarius*: the dilemma of *Russula* subsect. *Ochricompactae*. *Fung. Diversity* 28:15–40. (2)

Buyck, B., S. Adamčík, and D.P. Lewis. 2008. *Russula* section *Xerampelinae* in Texas. *Cryptogam. Mycol.* 29 (2):121–128. (1)  
*Russula texensis* Buyck, Adamčík & Lewis (HOLOTYPE: TEXAS. Newton Co.: Bleakwood; PC)

Castro-Mendoza, E. 1978. The fleshy fungi and bryophytes of the Central Mineral Region of Texas [M.S. Thesis]. Angelo State University, San Angelo, Texas. 82 pages. (30)

Coker, W.C. and J.N. Couch. 1928. The Gasteromycetes of the eastern United States and Canada. With a supplementary article "The Gasteromycetes of Ohio" by Minnie May Johnson. Dover Publications, New York. 283 p. (17)

Cooke, M.C. 1879. The fungi of Texas. *Ann. New York Acad. Sci.* 1:177–187. (33)

Cooke, M.C. 1880. The fungi of Texas. *J. Linn. Soc., Bot.* 17:141–144. (2)  
*Corticium carneum* Berk. & M.A. Curt. (HOLOTYPE: TEXAS. Harris Co: Houston; K)  
*Cyphella convoluta* Cooke (HOLOTYPE: TEXAS. Harris Co.: Houston; K)

Cooke, M.C. 1891. Species of *Cyphella*. *Grevillea* 20:9. (1)  
*Cyphella texensis* Berk. & M.A. Curt. (HOLOTYPE: TEXAS; K)

Cooke, W.B. 1971. The 1967 foray in Texas. *Mycologia* 63:1063–1067. (68)

Couch, J.N. 1938. The genus *Septobasidium*. The University of North Carolina Press, Chapel Hill. 480 p. (1)

Davidson, R.W., P.L. Lentz, and H.H. McKay. 1960 [1961]. The fungus causing pecky cypress. *Mycologia* 52:260–279. (1)

Desjardin, D.E. and R.H. Petersen. 1989. Studies on *Marasmius* from eastern North America. III. *Marasmius brevipes* and *Microphale* sect. *Rhizomorphigena*. *Mycologia* 81:76–84. (1)

Feibelman, T.P., J.W. Bennett, and W.G. Cibula. 1996. *Cantharellus tabernensis*: a new species from the southeastern United States. *Mycologia* 88:295–301. (1)

Freeman, A.E.H. 1979. *Agaricus* in North America: type studies. *Mycotaxon* 8:1–49. (4)

Fidalgo, M.E.P.K. 1968. The genus *Hexagonia*. *Mem. N.Y. Bot. Gard.* 17:35–108. (1)

Gilbertson, R.L. and D.M. Bigelow. 1997. Notes on *Wolfiporia dilatohypa* in North America. *Mycotaxon* 64:353–359. (1)

Gilbertson, R.L. and M. Blackwell. 1984. Two new basidiomycetes on living live oak in the southeast and Gulf Coast region. *Mycotaxon* 20:85–93. (2)

Gilbertson, R.L. and M. Blackwell 1985. Notes on wood-rotting fungi on junipers in the Gulf Coast region. *Mycotaxon* 24:325–348. (2)

Gilbertson, R.L. and M. Blackwell. 1987. Notes on wood-rotting fungi on junipers in the Gulf Coast region. II. *Mycotaxon* 28:369–402. (1)

Gilbertson, R.L. and M. Blackwell. 1988. Some new or unusual corticioid fungi from the Gulf Coast Region. *Mycotaxon* 33:375–386. (3)

Gilbertson, R.L. and L. Ryvarden. 1986. North American polypores. Vol. 1. *Fungiflora*, Oslo (Norway). p. 1–433. (47)

Gilbertson, R.L. and L. Ryvarden. 1987. North American polypores. Vol. 2. *Fungiflora*, Oslo (Norway). p. 434–885. (48)

\*\*Note: For the above two volumes, collections are not cited, rather dot maps are given.

Gilliam, M.S. 1976. The genus *Marasmius* in the northeastern United States and adjacent Canada. *Mycotaxon* 4:1–144. (1)

Ginns, J. 1992. Reevaluation of reports of 15 uncommon species of *Corticium* from Canada and the United States. *Mycotaxon* 44:197–217. (1)

Ginns, J. and M.N.L. Lefebvre. 1993. Lignicolous corticioid fungi (Basidiomycota) of North America. Systematics, distribution, and ecology. *Mycol. Mem.* 19:1–247. (79)

Guzmán, G. 1970. Monografía del género *Scleroderma* Pers. Emend. Fr. (Fungi-Basidiomycetes). *Darwiniana* 16:233–407. (7)

Guzmán, G. 1983. The genus *Psilocybe*. A systematic revision of the known species including the history, distribution and chemistry of the hallucinogenic species. *Beih. Nova Hedw.* 74:1–439. (1)

Guzmán, G. and F. Ramírez-Guillén. 2001. The *Amanita caesarea* complex. *Bibl. Mycol.* 187:1–66. (1)

Halling, R.E. 1983. The Genus *Collybia* (Agaricales) in the northeastern United States and adjacent Canada. *Mycol. Mem.* 8:1–148. (2)

Hedcock, G.G. and W.H. Long. 1912. Preliminary notes on three rots of juniper. *Mycologia* 4:109–114. (2)

Hesler, L.R. 1969. North American species of *Gymnopilus*. Mycol. Mem. 3:1–117. (5)  
*Gymnopilus rufosquamulosus* Hesler (HOLOTYPE: TEXAS. Aransas Co.: Rockport; MICH)

Hesler, L.R. and A.H. Smith. 1960. Studies on *Lactarius* I. The North American species of sect. *Lactarius*. Brittonia 12:119–139. (2)

Hesler, L.R. and A.H. Smith. 1960. Studies on *Lactarius* II. The North American species of sections *Scrobiculus*, *Crocei*, *Theiogali* and *Velleus*. Brittonia 12:306–350. (3)  
*Lactarius subvernalis* Hesler & A.H. Smith (HOLOTYPE: TEXAS. San Jacinto Co.: Coldspring; MICH)

Hesler, L.R. and A.H. Smith. 1963. North American species of *Hygrophorus*. University of Tennessee Press, Knoxville. 416 p. (8)

Hesler, L.R. and A.H. Smith. 1965. North American species of *Crepidotus*. Hafner Publishing Co., New York. 168 p. (1)

Hesler, L.R. and A.H. Smith. 1979. North American species of *Lactarius*. University of Michigan Press, Ann Arbor. 841 p. (22)  
*Lactarius eburneus* var. *ervinii* Hesler & A.H. Smith var. nov. (HOLOTYPE: TEXAS. Brazoria Co.: Liverpool; MICH)  
*Lactarius indigo* var. *diminutivus* Hesler & A.H. Smith var. nov. (HOLOTYPE: TEXAS. Brazoria Co.; MICH)  
*Lactarius moschatus* Hesler & A.H. Smith (HOLOTYPE: TEXAS. Brazoria Co.: Liverpool; MICH)

Hilber, O. 1997. The genus *Pleurotus* (Fr.) Kummer (2). Erschienen in Selbstverlas. 63 p. (1)

Homola, R.L. 1972. Section *Celluloderma* of the genus *Pluteus* in North America. Mycologia 64 (6):1211–1247. (1)

Hughes, K.W. (and 14 others). (2007) [2008]. *Megacollybia* (Agaricales). Rep. Tottori Mycol. Inst. 45:1–57. (1)  
*Megacollybia texensis* R.H. Petersen & D.P. Lewis (HOLOTYPE: TEXAS. Hardin Co.: Lance Rosier Unit, Big Thicket National Preserve; TENN)

Jackson, R.E. and C.J. Alexopoulos. 1976. *Psilocybe cubensis* (Agaricales): a comparison of Mexican and Texas types. Southw. Naturalist 21:227–233. (1)

Jejelowo, O.A. and S.P. Abraham. 1998. A preliminary list of larger fungi from Kingwood Forest northeast of Houston, Texas. Texas J. Sci. 50(2):143–148. (152)

Jenkins, D.T. 1977. A taxonomic and nomenclatural study of the genus *Amanita* section *Amanita* for North America. Bibl. Mycol. 57:1–126. (1)

Jenkins, D.T. 1986. *Amanita* of North America. Mad River Press, Eureka, California. 197 p. (16)

Lalli, G. and G. Pacioni. 1992. *Lactarius* sect. *Lactifluus* and allied species. Mycotaxon 44:155–195. (4)

Larsen, M.G. 1974. A contribution to the taxonomy of the genus *Tomentella*. Mycol. Mem. 4:1–145. (1)

Lewis, D.P. 1978. Agaricales of southeast Texas [M.S. Thesis]. Lamar University, Beaumont, Texas. 168 p. (86)

Lewis, D.P. and L. McGraw, Jr. 1981. Agaricales, family Amanitaceae, of the Big Thicket. Southw. Naturalist 26:1–4. (24)

Lewis, D.P. and L. McGraw, Jr. 1984. Studies on Big Thicket Agaricales. Southw. Naturalist 29:257–264. (75)

Lewis, D.P. and W.G. Cibula. 2000. Studies on Gulf Coast agarics (Basidiomycota: Agaricaceae); Notes on some interesting and rare species. Texas J. Sci. 52:65–78. (Suppl.) (16)

Linder, D.H. 1933. The genus *Schizophyllum* I. Species of the Western Hemisphere. Amer. J. Bot. 20(8):552–564. (1)

Lloyd, C.G. 1901. Mycol. Writ. 1:62. (1)

Lloyd, C.G. 1901. Mycol. Writ. 1:68–69. (1)

Lloyd, C.G. 1902. The Geastrae. Privately published, Cincinnati, Ohio. 44 pages. (1)

Lloyd, C.G. 1902. Mycol. Writ. 1:107–108. (3)

Lloyd, C.G. 1902. Mycol. Writ. 1:119–120. (1)

Lloyd, C.G. 1903. Mycol. Writ. 1:128, 130–131. (2)

Lloyd, C.G. 1903. Mycol. Writ. 1:139, 142–144. (5)

Lloyd, C.G. 1903. Mycol. Writ. 1:152, 154. (2)

Lloyd, C.G. 1904. Mycol. Writ. 1:197. (1)

Lloyd, C.G. 1906. Tylostomeae. Mycol. Writ. 2 (Tyl.):9–28. (7)  
*Tylostoma longii* Lloyd (HOLOTYPE; TEXAS. Denton Co.: Denton; BPI)  
*Tylostoma pygmaeum* Lloyd (HOLOTYPE; TEXAS. Denton Co.: Denton; BPI)  
*Tylostoma simulans* Lloyd (HOLOTYPE; TEXAS. Denton Co.: Denton; BPI)

Lloyd, C.G. 1906. The Nidulariaceae or "Bird's-Nest Fungi". Cincinnati, Ohio. 32 p. (1)

Lloyd, C.G. 1906. Mycol. Writ. 2:253, 255. (2)  
*Holocotylon texense* Lloyd (HOLOTYPE; TEXAS. Walker Co.: Huntsville; BPI)

Lloyd, C.G. 1906. Mycol. Writ. 2:271. (1)

Lloyd, C.G. 1906. Mycol. Writ. 2:279–280. (1)

Lloyd, C.G. 1906. Mycol. Writ. 2:301. (3)

Lloyd, C.G. 1907. Mycol. Writ. 2:329–330. (2)

Lloyd, C.G. 1907. Mycol. Writ. 2:360–361, 363. (6)

Lloyd, C.G. 1908. Mycol. Writ. 2:370. (1)

Lloyd, C.G. 1908. Mycol. Writ. 2:383–384. (1)

Lloyd, C.G. 1909. Mycol. Writ. 3:443. (1)

Lloyd, C.G. 1909. Synopsis of the known phalloids. Privately published, Cincinnati, Ohio. 96 pages. (3)

Lloyd, C.G. 1918. Mycol. Writ. 5:788. (1)  
    *Secotium australe* Lloyd (HOLOTYPE: TEXAS. Denton Co.: Denton; BPI)

Lloyd, C.G. 1919. Mycol. Writ. 5:818. (1)  
    *Geaster tomentosus* Lloyd (HOLOTYPE: TEXAS. Harris Co.: Houston; BPI)

Lloyd, C.G. 1919. Mycol. Writ. 5: Letters. 69:11. (1)  
    *Hydnus australe* Lloyd (HOLOTYPE: TEXAS. Harris Co.: Houston; BPI)

Lloyd, C.G. 1919. Mycol. Writ. 5:850. (1)

Lloyd, C.G. 1919. Mycol. Writ. 6:897. (1)  
    *Polystictus houstonii* Lloyd (HOLOTYPE: TEXAS. Harris Co.: Houston; BPI)

Lloyd, C.G. 1920. Mycol. Writ. 6:968. (8)

Lloyd, C.G. 1922. Mycol. Writ. 7:1168. (1)

Long, W.H. 1900. The local distribution and occurrence of the fungi of Austin, Texas and vicinity. Bull. Torrey Bot. Club 27:579–588. (4)

Long, W.H. 1907. The Phalloideae of Texas. J. Mycol. 13:102–114. (5)

Long, W.H. 1917. Notes on new or rare species of Gasteromycetes. Mycologia 9:271–274. (4)  
    *Arachniopsis albicans* Long gen. and sp. nov. (HOLOTYPE: TEXAS. Denton Co.: Denton)  
    *Geasteroides texensis* Long gen. and sp. nov. (HOLOTYPE: TEXAS. Denton Co.: Denton)

Long, W.H. 1939. Two pocket rots of hardwood trees. Bull. Torrey Bot. Club 66:625–627. (1)

Long, W.H. 1943. Studies in the Gasteromycetes. IX. The genus *Itajahya* in North America. Mycologia 35:620–628. (1)

Long, W.H. 1945. Studies in the Gasteromycetes. XI. The genera *Trichaster* and *Terrostella*. Mycologia 37:601–608. (1)

Long, W.H. 1946. The genus *Phellorina*. Lloydia 9:132–138. (1)

Long, W.H. 1946. Studies in the Gasteromycetes. XII. Five species of *Tylostoma* with membranous exoperidia. Mycologia 38:77–90. (1)

Long, W.H. 1946. Studies in the Gasteromycetes. XIII. The types of Miss White's species of *Tylostoma*. Mycologia 38:71–179. (1)

Long, W.H. 1947. Studies in the Gasteromycetes XV. Notes on new or rare species of *Tylostoma*. Lloydia 10:115–135. (2)  
    *Tylostoma asperum* Long (HOLOTYPE: TEXAS. Travis Co.: Austin)

Long, W.H. 1948. Studies in the Gasteromycetes XVI. The Geastraceae of the southwestern United States. Mycologia 40:547–585. (17)

Long, W.H. 1948. Studies in the Gasteromycetes XVIII. The phalloids of the southwestern United States. Lloydia 11:60–76. (8)

Mata, J.L. and R.H. Petersen. 2001. Type specimens studies in new world *Lentinula*. Mycotaxon 79:217–229. (1)

McKnight, K.H. and M. Stransky. 1980. Notes on *Podaxis argentinum* from North America. Mycologia 72:195–199. (1)

Miller, O.K. 1993. A new *Cortinarius* from southeastern Texas. Mycotaxon 47:461–466. (1)  
    *Cortinarius lewisii* O.K. Miller (HOLOTYPE: TEXAS. Hardin Co.: Lance Rosier Unit, Big Thicket National Preserve; VPI)

Miller, O.K. and D.L. Manning. 1976. Distribution of the lignicolous Tricholomataceae in the southern Appalachians. In: Parker, B.C., Roame, M.K., editors. The distributional history of the biota of the southern Appalachians part IV. Algae and Fungi. Biogeography, systematics, and ecology. University Press of Virginia, Charlottesville. p. 307–344. (1)

Miller, O.K. and R.P. Bhatt. 2004. *Amanita* subgenus *Lepidella* and related taxa in the southeastern United States. In: Cripps, C.L., editor. Fungi in forest ecosystems—systematics, diversity, and ecology. Mem. New York Bot. Gard., Vol. 89. p. 33–59. (3)

Miller, O.K. and L. Stewart. 1971. The genus *Lentinellus*. Mycologia 63:333–369. (1)

Miller, S.L. 1999. Hypogeous fungi from the southeastern United States II. The genus *Zelleromyces*. Mycotaxon 72:15–25. (1)  
    *Zelleromyces versicolor* S.L. Miller (HOLOTYPE: TEXAS. Hardin Co.: Lumberton; VPI)

Morales-Torres, E., M. Villegas, J. Cifuentes, and R. Tulloss. 1999. Revision of *Amanita alexandri* and its similarity to *Amanita polypyramis*. Mycotaxon 73:477–492. (1)

Mueller, G.M. 1992. Systematics of *Laccaria* (Agaricales) in the continental United States and Canada, with discussion on extralimital taxa and descriptions of extant species. Fieldiana Pub. 1435 n.s. no 30. 158 p. (5)

Murrill, W.A. 1903. The Polyporaceae of North America. IV. The genus *Elvingia*. Bull. Torrey Bot. Club 30:296–301. (1)

Murrill, W.A. 1904. The Polyporaceae of North America. VII. The genera *Hexagona*, *Grifola*, *Romellia*, *Coltricia*, & *Coltriciella*. Bull. Torrey Bot. Club 31:325–348. (1)

Murrill, W.A. 1904. The Polyporaceae of North America. VIII. *Hapalopilus*, *Pycnoporus*, and new monotypic genera. Bull. Torrey Bot. Club 31:415–428. (1)

Murrill, W.A. 1904. The Polyporaceae of North America. IX. *Inonotus*, *Sesia* and monotypic genera. Bull. Torrey Bot. Club 31:593–610. (1)  
    *Inonotus texanus* Murr. (HOLOTYPE: TEXAS. Travis Co.: Austin)

Murrill, W.A. 1905. The Polyporaceae of North America. X. *Agaricus*, *Lenzites*, *Cerrena*, and *Favolus*. Bull. Torrey Bot. Club 32:83–103. (2)

Murrill, W.A. 1905. The Polyporaceae of North America. XI. A synopsis of the brown pileate species. Bull. Torrey Bot. Club 32:353–371. (1)

Murrill, W.A. 1905. The Polyporaceae of North America. XIII. The described species of *Bjerkandera*, *Trametes*, and *Coriolus*. Bull. Torrey Bot. Club 32:633–656. (2)

Murrill, W.A. 1907. Polyporaceae. N. Amer. Fl. 9(1):1–72. (3)

Murrill, W.A. 1908. Polyporaceae. N. Amer. Fl. 9(2):73–132. (8)

*Inonotus juniperinus* Murr. (HOLOTYPE: TEXAS)

*Pyropolyporus texanus* Murr. (HOLOTYPE: TEXAS; BPI)

Murrill, W.A. 1915. Southern polypores. Published by the author, New York. 66 p. (7)

Murrill, W.A. 1920. Light-colored resupinate polypores II. Mycologia 12:299–308. (1)

Nakasone, K.K. and H.H. Burdsall, Jr. 1995. *Phlebia* species from the eastern and southeastern United States. Mycotaxon 54:335–359. (1)

Naohiko, S. 1984. On "Corpse Finder." *McIlvainea* 6:7–9. (1)

Overholts, L.O. 1967. The Polyporaceae of the United States, Alaska, and Canada. The University of Michigan Press, Ann Arbor. 466 p. (55)

Ovrebo, C.L. 1988. Notes on the cultural characters, morphology and distribution of *Ripartitella brasiliensis*. Mycotaxon 31:229–237. (1)

Parmasto, E. 2001. Hymenochaetoid Fungi (Basidiomycota) of North America. Mycotaxon 79:107–176. (7)

Pegler, D.N. 1983. The genus *Lentinus*—a world monograph. Kew Bull. Addit. Ser. X:1–281. (1)

Petersen, R.H. and K.W. Hughes. 2004. A preliminary monograph of *Lentinellus* (Russulales). Bibl. Mycol. 198:1–270. (1)

Punugu, A., M.T. Dunn, and A.L. Welden. 1980. The peniophoroid fungi of the West Indies. Mycotaxon 10:428–454. (1)

Redhead, S.A. 1984. The genus *Crinipellis* Pat. in Canada. In: Borghi, E., editor. La Famiglia delle Tricholomataceae. Proceedings of the Atti del Convegno Internazionale; 1984, Sept. 10–15. Borgo Val di Taro, Italy: Centro Studi per la Flora Mediterranea. p. 175–199. (1)

Redhead, S.A., J. Ginns, and R.A. Shoemaker. 1987. The *Xerula* (*Collybia*, *Oudemansiella*) *radicata* complex in Canada. Mycotaxon 30:357–405. (1)

Restivo, J.H. 1971. A checklist of the Agaricales and Cantharellaceae of the Stephen F. Austin Forest and the Nacogdoches, Texas area [M.S.Thesis]. Stephen F. Austin State University, Nacogdoches, Texas. 49 p. (80)

Ryvarden, L. 1984. Type studies in the Polyporaceae 16. Species described by J.M. Berkeley, either alone or with other mycologists from 1856 to 1886. Mycotaxon 20:329–364. (1)

Ryvarden, L. 1985. Type studies in the Polyporaceae 17. Species described by W.A. Murrill. Mycotaxon 23:169–198. (3)

Ryvarden, L. 1992. Type studies in the Polyporaceae—23. Species described by C.G. Lloyd in *Lenzites*, *Polystictus*, *Poria* and *Trametes*. Mycotaxon 44:127–136. (1)

Shaffer, R.L. 1964. The subsection *Lactarioideae* of *Russula*. Mycologia 56:202–231. (1)

Shaffer, R.L. 1970. Notes on the subsection *Crassotunicatinae* and other species of *Russula*. Lloydia 33:49–96. (1)

Shaffer, R.L. 1970. Cuticular terminology in *Russula* (Agaricales). Brittonia 22:230–239. (1)

Sims, K.P., R. Watling, and P. Jeffries. 1995. A revised key to the genus *Scleroderma*. Mycotaxon 56:403–420. (1)

Singer, R., J. Garcia, and L.D. Gómez. 1990. The Boletineae of Mexico and Central America I and II. Beih. Nova Hedwigia 98:1–77. (2)

Singer, R., J. García, and L.D. Gómez. 1991. The Boletineae of Mexico and Central America III. Beih. Nova Hedwigia 102:1–128. (4)

Singer, R., C.L. Ovrebo, and D.P. Lewis. 1990. A new species of *Melanomphalia* (Crepidotaceae). Mycotaxon 37:47–52. (1)

Singer, R., C.L. Ovrebo, and R.E. Halling. 1990. New Species of *Phylloporus* and *Tricholomopsis* from Colombia, with notes on *Phylloporus boletinoides*. Mycologia 82:452–459. (1)

Smith, A.H. 1937. Studies on the genus *Mycena* IV. Mycologia 29:338–354. (1)

*Mycena texensis* A.H. Smith (HOLOTYPE: TEXAS. Eastland Co.: Cisco; MICH)

Smith, A.H. 1939. Studies in the genus *Agaricus*. Pap. Mich. Acad. Sci. 23:107–138. (2)

*Agaricus ciscoensis* A.H. Smith (HOLOTYPE: TEXAS. Eastland Co.: Cisco; MICH)

Smith, A.H. 1944. New North American agarics. Mycologia 36:242–262. (2)

*Agaricus eastlandensis* A.H. Smith (HOLOTYPE: TEXAS. Eastland Co.: Cisco; MICH)

*Agaricus vinaceo-umbrinus* A.H. Smith (HOLOTYPE: TEXAS. Eastland Co.: Cisco; MICH)

Smith, A.H. 1947. North American species of *Mycena*. University of Michigan Press, Ann Arbor. 521 p. (2)

Smith, A.H. 1960. *Tricholomopsis* (Agaricales) in the Western Hemisphere. Brittonia 12:41–70. (2)

Smith, A.H. 1972. The North American species of *Psathyrella*. Mem. New York Bot. Gard. 24:1–633. (7)

*Psathyrella cloverae* A.H. Smith (HOLOTYPE: TEXAS. Hidalgo Co.: Mission; MICH)

*Psathyrella texensis* A.H. Smith (HOLOTYPE: TEXAS. Montgomery Co.: Richards; MICH)

*Psathyrella thiersii* A.H. Smith (HOLOTYPE: TEXAS. Montgomery Co.: Richards; MICH)

Smith, A.H. and L.R. Hesler. 1962. Studies on *Lactarius* III. The North American species of section *Plinthogali*. Brittonia 14:369–440. (1)

*Lactarius lignyotus* var. *texensis* Smith & Hesler var. nov. (HOLOTYPE: TEXAS. Montgomery Co.: Richards; MICH)

Smith, A.H. and L.R. Hesler. 1968. The North American species of *Pholiota*. Hafner Publ. Co., New York. 402 p. (2)

Smith, A.H. and R. Singer. 1964. A monograph on the genus *Galerina* Earle. Hafner Publ. Co., New York. 246 p. (1)

Smith, A.H. and H.D. Thiers. 1964. A contribution toward a monograph of North American species of *Suillus*. Privately published, Ann Arbor. 166 p. (2)

Smith, H.V. and N.S. Weber. 1982. Selected species of *Leucocoprinus* from the southeastern United States. Contr. Univ. Michigan Herb. 15:297–309. (3)  
*Leucocoprinus breviramus* H.V. Smith & Weber (HOLOTYPE: TEXAS. Brazoria Co.: Liverpool; MICH)  
*Leucocoprinus magnicystidiosus* H.V. Smith & Weber (HOLOTYPE: TEXAS. Brazoria Co.: Liverpool; MICH)

Smith, H.V. and N.S. Weber. 1987. Observations on *Lepiota americana* and some related species. Contr. Univ. Michigan Herb. 16:211–221. (2)  
*Lepiota besseyi* H.V. Smith & Weber (HOLOTYPE: TEXAS. Brazoria Co.: Lake Jackson; MICH)

Stevenson, J.A. and E.K. Cash. 1936. The new fungus names proposed by C. G. Lloyd. Bull. Lloyd Libr. Mus., Bull. No. 35, Mycol. Ser. No. 8. 209 p. (13)

Thiers, H.D. 1956. The Agaricaceae of the pine belt and adjacent areas in eastern Texas [Ph.D. Thesis]. University of Michigan, Ann Arbor. 568 p. (205)

Thiers, H.D. 1956. A preliminary report of the agaric flora of eastern Texas. Texas J. Sci. 8:257–263. (37)

Thiers, H.D. 1957. The agaric flora of Texas I. New species of agarics and boletes. Mycologia 49:707–722. (12)  
*Amanita alba* Thiers. (HOLOTYPE: TEXAS. Brazos Co.: College Station; MICH)  
*Amanita salmonea* Thiers (HOLOTYPE: TEXAS. Brazos Co.: College Station; MICH)  
*Boletus roseobrunneus* Thiers (HOLOTYPE: TEXAS. Grimes Co.: Navasota; MICH)  
*Boletus silvaticus* Thiers (HOLOTYPE: TEXAS. Grimes Co.: Navasota; MICH)  
*Cystoderma texensis* Thiers (HOLOTYPE: TEXAS. Montgomery Co.: Richards; MICH)  
*Lactarius albolutescens* Thiers. (HOLOTYPE: TEXAS. Montgomery Co.: Richards; MICH)  
*Lactarius albus* Thiers (HOLOTYPE: TEXAS. Walker Co.: Huntsville; MICH)  
*Lactarius cystidiosus* Thiers (HOLOTYPE: TEXAS. San Jacinto Co.: Stubblefield Lake; MICH)  
*Lactarius eburneus* Thiers (HOLOTYPE: TEXAS. Walker Co.: Huntsville; MICH)  
*Lactarius echinatus* Thiers (HOLOTYPE: TEXAS. Walker Co.: Huntsville; MICH)  
*Lactarius mordax* Thiers (HOLOTYPE: TEXAS. Grimes Co.: Navasota; MICH)  
*Lactarius obnubiloides* Thiers (HOLOTYPE: TEXAS. Brazos Co.: Millican; MICH)

Thiers, H.D. 1958. The agaric flora of Texas II. New taxa of white- and pink-spored agarics. Mycologia 50:514–523. (9)  
*Collybia delicata* Thiers (HOLOTYPE: TEXAS. Brazos Co.: Wellborn; MICH)  
*Collybia lignicola* Thiers (HOLOTYPE: TEXAS. San Jacinto Co.: Coldspring; MICH)  
*Marasmius puniceus* Thiers (HOLOTYPE: TEXAS. Brazos Co.: Millican; MICH)  
*Melanoleuca reai* var. *texana* Thiers var. nov. (HOLOTYPE: TEXAS. Brazos Co.: College Station; MICH)  
*Mycena radicata* Thiers (HOLOTYPE: TEXAS. Montgomery Co.: Richards; MICH)  
*Mycena avellaneibrunnea* Thiers (HOLOTYPE: TEXAS. San Jacinto Co.: Coldspring; MICH)  
*Mycena epipterygia* var. *caespitosa* Thiers var. nov. (HOLOTYPE: TEXAS. Montgomery Co.: Richards; MICH)  
*Rhodophyllus verrucosus* Thiers (HOLOTYPE: TEXAS. Brazos Co.: Wellborn; MICH)  
*Tricholomopsis squamosa* Thiers (HOLOTYPE: TEXAS. Walker Co.: Huntsville; MICH)

Thiers, H.D. 1959. The agaric flora of Texas III. New taxa of brown- and black-spored agarics. Mycologia 51:529–540. (11)  
*Agaricus placomyces* var. *flavescens* Thiers var. nov. (HOLOTYPE: TEXAS. Brazos Co.: Wellborn; MICH)  
*Conocybe antipoda* var. *humicola* Thiers var. nov. (HOLOTYPE: TEXAS. Brazos Co.: Wellborn; MICH)  
*Coprinus comatus* var. *texensis* Thiers var. nov. (HOLOTYPE: TEXAS. Montgomery Co.: near San Jacinto River; MICH)  
*Coprinus subangularis* Thiers (HOLOTYPE: TEXAS. Montgomery Co.: Richards; MICH)  
*Coprinus subcurtus* Thiers (HOLOTYPE: TEXAS. Brazos Co.: Millican; MICH)  
*Cortinarius acystidiosus* Thiers (HOLOTYPE: TEXAS. San Jacinto Co.: Coldspring; MICH)  
*Cortinarius paliformis* Thiers. (HOLOTYPE: TEXAS. Walker Co.: Huntsville; MICH)  
*Galerina autumnalis* f. *robusta* Thiers f. nov. (HOLOTYPE: TEXAS. Montgomery Co.: Richards; MICH)  
*Gymnopilus luteoviridis* Thiers. (HOLOTYPE: TEXAS. Brazos Co.: near Navasota River, College Station; MICH)  
*Inocybe texensis* Thiers (HOLOTYPE: TEXAS. Walker Co.: Huntsville; MICH)  
*Psathyrella hymenocephala* var. *farinacea* Thiers var. nov. (HOLOTYPE: TEXAS. Montgomery Co.: Richards; MICH)

Thiers, H.D. 1959. Notes on the genus *Boletus* in Texas. Texas J. Sci. 11:314–319. (50)

Thiers, H.D. 1963. The bolete flora of the Gulf Coastal Plain. I. The Strobilomycetaceae. J. Elisha Mitchell Sci. Soc. 79:32–41. (5)

Torrwa-Torres, M.G. and L. Guzmán-Dávalos. 2008. Taxonomic status and new localities for *Ganoderma ravenelii*. Mycotaxon 103:33–40. (2)

Tyler, V.E. and A.H. Smith. 1963. Protoalkaloids of *Panaeolus* species. Biochem. Physiol. Alkaloide Halle 21:47–54. (1)  
*Panaeolus texensis* Tyler & A.H. Smith (HOLOTYPE: TEXAS. Eastland Co.: Cisco; MICH)

Tulloss, R.E. and D.P. Lewis. 1994. *Amanita westii*—taxonomy and distribution. A rare species from states bordering the Gulf of Mexico. Mycotaxon 50:131–138. (1)

Urcelay, C. and M. Rajchenberg. 1999. Two North American *Inonotus* (Hymenochaetaceae, Aphylophorales) found in Argentina. *Mycotaxon* 72:417–422. (1)

White, V.S. 1901. The Tylostomaceae of North America. *Bull. Torrey Bot. Club* 28:421–444. (3)

White, V.S. 1902. The Nidulariaceae of North America. *Bull. Torrey Bot. Club* 29:251–280. (1)

Wright, J.E. 1987. Two new species of *Tulostoma* (Gasteromycetes) from Texas. *Mycologia* 79:155–157. (2)

*Tulostoma clathrosporum* Wright (HOLOTYPE: TEXAS. Eastland Co.: Cisco; SFSU).

*Tulostoma thiersii* Wright (HOLOTYPE: TEXAS. Kimble Co.: near Junction; BAFC).

Zeller, S.M. 1943. North American species of *Galeropsis*, *Gyrophragmium*, *Longia*, and *Montagnea*. *Mycologia* 35:409–421. (2)

#### DISCUSSION

We fear and predict that we have missed references for Texas because distribution reports are often found in obscure journals. We welcome feedback on citations that we may have missed and it is anticipated that a follow-up article with updated references will likely be forthcoming.

In addition to technical articles where collections are cited, there is additional literature in the format of field guides that include fungi found in Texas. Important is the field guide by Metzler and Metzler (1992) which includes 202 species primarily from southeastern Texas. Other useful field guides for the area include those by Bessette et al. (2000), Bessette et al. (2007), Horn et al. (1993), Lincoff (1981), Phillips (2005) and Weber and Smith (1985).

#### PART II—NEW COMBINATIONS

The following two combinations are proposed in accordance with modern generic concepts based on morphology (Singer 1986) and supported by molecular evidence (Matheny 2006). During the process of preparing this manuscript and checking information in the protologue (Cibula 1979) for *Hygrophorus chamaeleon*, it came to our attention that the information regarding the type designation was not in order. In the protologue, the type collection information for *chamaeleon* was cited as follows:

“Specimen typicum Cibula n. 589 in Herb. Mass conservatum est; legit prope Saucier, MS, 8 August 1974.”

The first thing noticed was that the date for 589 was inconsistent with other numbers in the 500's for collections cited in the Materials Studied, and 589 was not again cited in the Materials Studied. Checking no. 589 in Cibula's field record book, which we have, 589 is listed as a *Russula*, and the date of that collection is 9 Oct. 1975. No *Hygrophorus* species were collected on that date. Unfortunately, we have not been able to confirm the whereabouts of 589 if it still exists as a collection. Checking the other collection numbers from Materials Studied of *chamaeleon* in Cibula's record book, he has “type” written next to coll. no. 489 and 489 is also cited in the Materials Studied. Upon examination of collection no. 489, “type spec.” is written on the associated hand-written field label. The field label, record book and the original 5 × 8 in card with macroscopic description and collecting data all give the date for no. 489 as 20 Aug. 1974. Based on evidence from the field book and field label, Cibula had intended to designate 489 as the holotype, but somehow mistyped the collection information and date in the Latin description. We can find no violation of any articles in the International Code of Botanical Nomenclature (McNeill et al. 2006) for this error. We correct this error and conclude that Cibula coll. no. 489 is the holotype. Given below are the new combinations including the corrected type information for *H. chamaeleon*.

**Hygrocybe chamaeleon** (Cibula) Lewis & Ovrebo, comb. nov. BASIONYM: *Hygrophorus chamaeleon* Cibula, *Mycotaxon* 10:109. 1979. HOLOTYPE: MISSISSIPPI. HARRISON CO.: Saucier, Harrison Experimental Forest, De Soto National Forest, in humus along broadleaf evergreen draw across from Block II Plot 1, loblolly pine (north of plot), Fertilization Study Plots, 20 Aug 1974, W.G. Cibula 489 (NY!).

**Hygrocybe mississippiensis** (Cibula) Lewis & Ovrebo, comb. nov. BASIONYM: *Hygrophorus mississippiensis* Cibula, *Mycotaxon* 10:106. 1979. HOLOTYPE: MISSISSIPPI. HARRISON CO.: Saucier, Harrison Experimental Forest, De Soto National Forest, on a raised mound of earth and stumps, and in leaf litter in mixed bottomland hardwoods, adjacent to Block IV, Plot 4, loblolly pine, Fertilization Study Plots, 8 Aug 1974, W.G. Cibula 485 (NY!).

The field label gives the habitat for *H. mississippiensis* as a mixed pine/hardwood ravine. *Hygrocybe mississippiensis* was previously

reported from Texas (Lewis & Cibula 2000). The holotype collections of *H. chamaeleon* and *H. mississippiensis* were originally deposited at MASS, they are now at NY.

### PART III—NEW RECORDS OF FLESHY FUNGI FOR TEXAS

The following records are a result of long-term efforts by D.P Lewis and C.L. Ovrebo of documenting the mycota of southeast Texas, through organized amateur and professional forays, and individual outings. This listing represents only a small beginning to the updating of fungus records for Texas and reflects only collecting done in southeast Texas. As is the case with all biodiversity studies, knowledge of the biodiversity of a region is a function of the efforts that have been mounted to conduct field work, and importantly, records must be based on vouchered collections. With the exception of the researches of Harry Thiers and David Lewis, no other mycologists have devoted equally the time and effort in cataloguing in a scientific way the fleshy mycota for this region. For this reason, our knowledge of the diversity of fungi for southeast Texas, let alone the entire state of Texas, is far from complete.

The orders and families listed below may not be the ones readers are most familiar with. Until recent years, families of mushrooms and boletes were included in the Agaricales (see Singer 1986). The order and family circumscriptions have changed significantly as a result of recent phylogenetic molecular analyses and now mushroom-type fungi and other fleshy fungi maybe placed in different orders and families to reflect a more natural classification system. Most of the classification hierarchy below is taken from Matheny et al. (2006) and the reader is directed to that entire Mycologia issue devoted to recent developments in elucidating our understanding of phylogenies of fungi.

#### BASIDIOMYCOTA: AGARICOMYCETES: AGARICALES

##### AGARICACEAE

**Agaricus argenteus** Braendle in Peck. Found on lawns.

Voucher specimen: **Galveston Co.**: Santa Fe, Santa Fe Independent School grounds, field at corner of 6<sup>th</sup> Street and Warpath Street, N 29° 23.049', W 95° 06.383', 24 Jan 2008, DPL-8493 (F).

**Agaricus pocillator** Murr. Found in mixed pine-hardwood forest.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Jack Gore Baygall Unit, off FM 2937, 9 Nov 2002, DPL-6647 (F). **Orange Co.**: Vidor, near 455 Virginia Lane, 15 Jan 1989, DPL-4232 (F).

##### CORTINARIACEAE

**Cortinarius aureifolius** Peck. Found in an arid sandyland with *Pinus palustris* and oaks. (**Fig. 1**).

Voucher specimens: **Newton Co.**: Lewis Chapel community, Sand Ridge Cemetery, CR 4045, N 30° 44.580', W 93° 46.127', 19 Dec 2007, Ovrebo 4718 & 4719 (CSU).

**Cortinarius corrugatus** Peck. Under *Quercus laurifolia* and in beech-oak forest.

Voucher specimens: **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 19 Oct 2004, DPL-6959 (F). Mayflower, Canyon Rim Nature Trail, N 31° 06.927', W 93° 43.752', 27 Oct 2004, DPL-7049 (F); 29 Jul 2005, DPL-7286 (F).

**Cortinarius hesleri** Ammirati & A.H. Smith. Found in hardwood bottomland and oak-hickory forests.

Voucher specimens: **Newton Co.**: Toledo-Bend, Sam Forse Collins Recreational Area, N 31° 10.029', W 93° 34.620', 20 Jul 2007, DPL-8129 (F). **Tyler Co.**: Big Thicket National Preserve: Neches River Corridor Unit, Round Lake area, 13 Sep 2003, DPL-6807 (F).

**Cortinarius violaceus** (L.) S.F. Gray. Found in older pine forests.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Turkey Creek Unit, Kirby Nature Trail, 3 Dec 1978, DPL-1670 (F); Jack Gore Baygall Unit, Arco Oil Field Road, 28 Nov 1980, DPL-2451 (F); Jack Gore Baygall Unit, near FM 2937, 30 October 1993, DPL-5092 (F); 9 Nov 2002, DPL-6645 (F); 27 Nov 2004, DPL-7104 (F); Saratoga, Lance Rosier Unit, Teel Road, N 30° 15.629', W 94° 31.532', 7 Nov 2006, DPL-7608 (TAES); 11 Nov 2006, DPL-7643 (TAES). **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 1 Nov 1997, DPL-5962 (F).

##### ENTOLOMATACEAE

**Clitopilus prunulus** (Scop.) P. Kumm. Found in floodplains, oak and pine forest.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Saratoga, Lance Rosier Unit, Cotton Road, 10 Jul 1988, DPL-4135 (F). **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 10 Jun 2001, DPL-6459 (F); 18 Jun 2003, DPL-6687 (F); 12 Sep 2007, DPL-8274 (F).

**Clitopilus hobsonii** (Berk. & Br.) P.D. Orton. Found on rotten wood. Previously known from Europe, Florida and North Carolina.

Voucher specimen: **Hardin Co.**: Silsbee, residence on Pine Street, 31 Jul 1988, DPL-4163 (F).

**Entoloma megacystidiosum** Hesler. Found in mixed pine-hardwood and beech forests, previously known only from the type in Tennessee.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Lance Rosier Unit, Saratoga, Cotton Road, 13 Jun 2007, DPL-7906 (F); Turkey Creek Unit, Kirby Nature Trail, 22 Jul 2007, DPL-8141 (F). **Newton Co.**: Mayflower, Canyon Rim Nature Trail, N 31° 06.927', W 93° 43.752', 3 Jul 2007, DPL-8084 (F); 20 Jul 2007, DPL-8122 (F).

## HYGROPHORACEAE

**Hygrocybe chamaeleon** (Cibula) Lewis & Ovrebo. Found in moss and mixed pine and hardwood forests, previously known from Harrison Co., Mississippi. (**Fig. 3**).

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Saratoga, Lance Rosier Unit, Cotton Road, 13 Jun 2007, DPL-7911 (F); Turkey Creek Unit, Kirby Nature Trail, 22 Jul 2007, DPL-8142 (F).

**Hygrophorus borealis** f. **salmoneus** Coker. Known only from the type in North Carolina. Found in an upland pine forest next to *Magnolia grandifolia*.

Voucher specimen: **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 24 Nov 2008, DPL-8815 (F).

**Hygrophorus caespitosus** (Murr.) Murr. Found in hardwood forests.

Voucher specimens: **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 28 Jun 2003, DPL-6716 (F); 5 Jul 2003, DPL-6742 (F). **Tyler Co.**: Temple-Inland Forest Lake Experimental Forest, *Quercus alba* test plot 26 Jun 1994, DPL-5305 (F).

**Hygrophorus hypothejus** (Fr.) Fr. Found with *Pinus taeda*.

Voucher Specimens: **Jasper Co.**: Buna, Temple-Inland Black Branch Hunting Club, off CR 701 and FM 1004, 24 Dec 1991, DPL-4578 (F). **Newton Co.**: Lewis Chapel Community, Sand Ridge Cemetery, CR 4045, 30 Dec 2006, DPL-7798 (F). **Tyler Co.**: Big Thicket National Preserve, Turkey Creek Unit, Muscadine Road, 15 Dec 1979, DPL-2147 (F).

**Hygrophorus perplexus** A.H. Smith & Hesler. Found in mixed pine and hardwoods.

Voucher specimen: **Hardin Co.**: Big Thicket National Preserve, Saratoga, Lance Rosier Unit, Teel Road, N 30° 15.629', W 94° 31.532', 11 Nov 2006, DPL-7623 (TAES).

## HYMENOGASTRACEAE

**Hebeloma sarcophyllum** (Peck) Sacc. Found with *Quercus alba* and mixed pine-hardwood forests.

Voucher specimens: **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 13 May 2000, DPL-6265 (F). **Tyler Co.**: Temple-Inland Forest Lake Experimental Forest, *Quercus alba* test plot, 15 Jun 1994, DPL-5258 (F).

**Hebeloma sinapizans** (Fr.) Sacc. Found in mixed pine and hardwood forests.

Voucher specimens: **Newton Co.**: Lewis Chapel community, Sand Ridge Cemetery Road, CR 4045, near cemetery, N 30° 44.572', W 93° 46.094', 21 Dec 2007, DPL-8438 (F). **Tyler Co.**: Big Thicket National Preserve: Canyonlands Unit, near Spurger, N 30° 43.241', W 94° 08.404', 20 Dec 2007, DPL-8463, DPL-8464 (F).

## LYOPHYLLACEAE

**Tephrocybe palustris** (Peck) Donk. Found in sphagnum moss.

Voucher specimens: **Orange Co.**: Vidor, near Virginia Lane, 10 May 1979, DPL-1724, DPL-1725 (F); 22 Feb 1986, DPL-3954 (F); 28 Feb 1990, DPL-4355 (F).

## MARASMIACEAE

**Marasmius fulvoferrugineus** Gilliam. Found in leaf litter.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Lance Rosier Unit, Saratoga, Teel Rd, N 30° 15.629', W 94° 31.532', 11 Nov 2006, DPL-7681 (TAES); 19 Jul 2007, DPL-8107 (F); Turkey Creek Unit, Kirby Nature Trail, 16 Jun 2007, DPL-7989 (F). **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 20 Nov 2004, DPL-7092 (F).

## OMPHALOTACEAE

**Gymnopus luxurians** (Peck) Murr. Subcaespitose on pine mulch.

Voucher specimen: **Jefferson Co.**: Beaumont, campus of Lamar University near John Gray Institute, 10 Jul 2006, DPL-7494 (F).

## PLUTEACEAE

**Volvariella pusilla** (Pers.) Sing. Found on soil, with mixed pine and hardwoods.

Voucher specimen: **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 31 Aug 2003, DPL-6770 (F).

**Volvariella taylori** (Berk. & Br.) Sing. Found in a dried up cypress swamp.

Voucher specimen: **Hardin Co.**: Big Thicket National Preserve, Saratoga, Lance Rosier Unit, Teel Road, N 30° 15.629', W 94° 31.532', 17 Jun 2006, DPL-7422 (F).

**PSATHYELLACEAE**

**Psathyrella rugocephala** (G.F. Atk.) A.H. Smith. Found in a hardwood forests.

Voucher specimens: **Fort Bend Co.**: Brazos Bend State Park, Hale Lake Nature Trail, 18 Nov 2006, DPL-7759 (F, TAES).

**Psathyrella carbonicola** A.H. Smith. Reported from the western U.S. and Michigan. On burned ground.

Voucher specimen: **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 27 Nov 2008, DPL-8818 (F).

**STROPHARIACEAE**

**Hypoloma sublateritium** (Fr.) Quél. Found on a well decayed hardwood stump.

Voucher specimen: **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 28 Nov 2008, DPL-8823 (F)

**Phaeomarasmius curcuma** (B. & C.) Sing. Found on wood (**Fig. 2**).

Voucher specimens: **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 24 Dec 1999, DPL-6214 (F); 21 Nov 2007, Ovrebo 4706 (CSU). **Orange Co.**: Vidor, near 455 Virginia Lane, 12 Apr 1977, DPL-915 (F); 14 May 1977, DPL-949 (F); 17 May 1977, DPL-955 (F); 23 May 1977, DPL-973 (F); 21 Apr 1978, DPL-1361 (F); 4 May 1978, DPL-1372 (F); 29 Dec 1981, DPL-2856 (F).

**Psilocybe caerulescens** Murr. Found in a *Pinus* plantation. Known from Alabama, central Mexico, Venezuela and Brazil.

Voucher specimen: **Tyler Co.**: Big Thicket National Preserve, Spurger, in pine plantation near Neches River Corridor Unit, 13 Sep 2003, DPL-6800 (F, XAL).

**TRICHOLOMATACEAE**

**Clitocybe trulliformis** (Fr.) P. Karst. Found in pine duff.

Voucher Specimen: **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 28 Jan 2001, DPL-6400 (F).

**Tricholoma niveipes** Peck. Found in arid sandy soil with pines and oaks (**Fig. 4**).

Voucher specimens: **Newton Co.**: Lewis Chapel Community, Sand Ridge Cemetery, CR 4045, N 30° 44.572', W 93° 46.094', 30 Dec 2006, Ovrebo 4637 & 21 Dec 2007, Ovrebo 4731 (CSU). (Fig. 4)

## BOLETALES

**Boletellus chrysenteroides** (Snell) Sing. Found in mixed pine-hardwood forests.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Turkey Creek Unit, Kirby Nature Trail, Big 19 Sep 1980, DPL-2314 (F); Jack Gore Baygall Unit, off FM 2937, 4 Jul 1981, DPL-2664 (F); Lance Rosier Unit, Cotton Road, near Saratoga, 28 May 1984, DPL-3656 (F); 5 Aug 1984, DPL-3697 (F). **Tyler Co.**: Big Thicket National Preserve, Beech Creek Unit, Nature Trail, 4 Aug 1982, DPL-3241 (F); Spurger, near Neches River, 10 Aug 1982, DPL-3276 (F).

**Boletus auripes** Peck. Found with *Quercus alba*, *Quercus falcata* var. *leucophylla*, *Quercus nigra* and other oaks.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Jack Gore Baygall Unit, off FM 2937, 16 Aug 1982, DPL-3328 (F); Saratoga, Lance Rosier Unit, Cotton Road, 5 Aug 1984, DPL-3700 (F). **Tyler Co.**: Temple-Inland Forest Lake Experimental Forest, Sawtooth oak (*Quercus* sp.) test plot, 9 Jun 1992, DPL-4635 (F); *Quercus alba* test plot, 12 Jun 1992, DPL-4636 (F); *Quercus falcata* var. *leucophylla* test plot, 21 Jun 1992, DPL-4699 (F); *Quercus nigra* test plot, 7 Jun 1997, DPL-5783 (F).

**Boletus hortonii** A.H. Smith & Thiers. Found in stream floodplain forest.

Voucher specimen: **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 1 Jul 1996, DPL-5672 (F).

**Boletus hypocarycinus** Sing. Found in floodplains, oak and pine forest.

Voucher specimens: **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 19 Oct 2004, DPL-6966 (F). Lewis Chapel community, Sand Ridge Cemetery Road, CR 4045, 12 Jul 2006, DPL-7519 (F). Burkeville, along FM 692, 31 Jul 2007, DPL-8205 (F). **Orange Co.**: Vidor, near 455 Virginia Lane, 10 Oct 1993, DPL-5035 (F). **Tyler Co.**: Dam-B, residence on CR 4136, off FM 92, N 30° 48.811', W 94° 12.600', 10 Jul 1995, DPL-5498 (F). Temple-Inland Forest Lake Experimental Forest, *Quercus alba* test plot, 7 Aug 1995, DPL-5573 (F). Big Thicket National Preserve, Beech Creek Unit, south boundary road, 14 Jul 2006, DPL-7530 (F).

**Boletus longicurvipes** Snell & A.H. Smith. Found in mixed pine-hardwood forests, near baygall communities and in beech forests.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Jack Gore Baygall Unit, Arco Oil Field Road, 1 Aug 1982, DPL-3233 (F); Saratoga, Lance Rosier Unit, Cotton Road, 20 Oct 1984, DPL-3750 (F); Turkey Creek Unit, Kirby Nature Trail, 27 Oct 1984, DPL-3767 (F). **Montgomery Co.**: Conroe, Kidd Road, Big Ron's Construction Office, N 30° 15.326', W 95° 25.481', 28 Jul 2007, DPL-8176 (F).

**Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 26 Aug 2001, DPL-6518 (F); 24 Jul 2007, DPL-8151 (F). **Orange Co.**: Vidor, near 455 Virginia Lane, 30 Aug 1979, DPL-1916 (F); 15 Aug 1982, DPL-3317 (F).



Figs. 1–4. 1. *Cortinarius aureofolius*. 2. *Phaeomarasmius cucurbita*. 3. *Hygrocybe chamaeleon*. 4. *Tricholoma niveipes*. Scale bar = 10 mm.

**Boletus morrisii** Peck. Found in beech hammocks next to baygall communities.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Jack Gore Baygall Unit, Arco Oil Field Road, 5 Aug 1983, DPL-3584 (F); 25 Sep 1983, DPL-3617 (F).

**Boletus rufomaculatus** Both. Found in mixed pine-hardwood forests.

Voucher specimen: **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 7 October 2004, DPL-6929 (F).

**Tylopilus eximius** (Peck) Sing. Found in beech hammocks next to baygall communities.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Jack Gore Baygall Unit, Arco Oil Field Road, 25 Jun 1983, DPL-3532 (F); 5 Aug 1983, DPL-3585 (F); 25 Sep 1983, DPL-3618 (F); 18 May 1984, DPL-3651 (F); off FM 2937, 26 Jul 1985, DPL-3878 (F).

**Nacogdoches Co.**: Angelina National Forest, Stephen Austin Experimental Forest, 17 Sep 1994, DPL-5338 (F).

**Xanthoconium purpureum** Snell & Dick. Found in bottomland hardwood forests.

Voucher specimens: **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 1 Jul 1996, DPL-5677 (TAES); 24 Jul 2007, DPL-8154 (F).

**Rhizopogon baxteri** A.H. Smith. Known from Michigan and Mississippi.

Voucher specimen: **Hardin Co.**: Big Thicket National Preserve, Lance Rosier Unit, Saratoga, Teel Road, 15 Nov 2008, DPL-8800 (F).

## CANTHARELLALES

**Craterellus odoratus** (Schwein.) Fr. Found in mixed pine and hardwood forests.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Saratoga, Lance Rosier Unit, Teel Road, N 30° 15.629', W 94° 31.532', 13 Jun 2007, DPL-7904 (F). **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 18 Jul 2003, DPL-6758 (F). **Polk Co.**: Big Thicket National Preserve, Big Sandy Unit, off CR 1071, 24 Jul 1976, DPL-445 (F). **Tyler Co.**: Fred, residence on FM 1943, 8 May 1976, DPL-23 (F).

## HYMENOCHAETALES

**Inonotus amplicans** Murr. Found on living branch of *Asimina parviflora*.

Voucher specimens: **Newton Co.**: Lewis Chapel Community, Sand Ridge Cemetery, CR 4045, 30 Jul 2006, DPL-7553 (F); 21 Jul 2007, DPL-8134 (F).

## POLYPORALES

**Laetiporus persicinus** (B. & C.) Gilbertson. Found at the base of tree/dead stump.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Lance Rosier Unit, Saratoga, Teel Rd, N 30° 15.629', W 94° 31.532', 17 Jun 2006, DPL-7450 (TAES, PC); Turkey Creek Unit, Kirby Nature Trail, 22 Jul 2007, DPL-8145 (F).

**Pseudofavolus cucullatus** (Mont.) Pat. A tropical species found on small branches and twigs.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Lance Rosier Unit, Saratoga, Teel Road, 15 Nov 2008, DPL-8797 (F); Big Thicket National Preserve, Turkey Creek Unit, Kirby Nature Trail, 16 Jun 2007, DPL-7999 (F); 22 Jul 2007, DPL-8144 (F); Lumberton, Village Creek State Park, Nature trail, 23 Jun 2001, DPL-6479 (LSU). **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 11 Jul 2000, DPL-6342 (F).

## RUSSULALES

### PODOSCYPHACEAE

**Cymatoderma caperatum** (Berk. & Mont.) D.A. Reid. A tropical species found on wood.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Lance Rosier Unit, Saratoga, Teel Road, N 30° 15.629', W 94° 31.532', 13 Jun 2007, DPL-7905 (F). **Harris Co.**: Pasadena, Armand Bayou Nature Center, 17 Nov 2007, DPL-8325 (TAES).

### RUSSULACEAE

**Lactarius argillaceifolius** Hesler & A.H. Smith. Found in mixed pine and hardwood forests.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Saratoga, Lance Rosier Unit, Teel Road, N 30° 15.629', W 94° 31.532', 11 Nov 2006, DPL-7670 (TAES). **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 7 Sep 1996, DPL-5709 (F); 29 Oct 1998, DPL-6116 (F).

**Lactarius atroviridis** Peck. Found in mixed pine and hardwood forests.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Lance Rosier Unit, Cotton Road, near Saratoga, 15 Oct 1983, DPL-3633 (F). **Nacogdoches Co.**: Angelina National Forest, Stephen F. Austin Experimental Forest, 17 Sep 1994, DPL-5339 (F); 24 Sep 1994, DPL-5340 (F). **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 17 Sep 1996, DPL-5339 (F); 4 November 1998, DPL-6121 (F); 11 Nov 2004, DPL-7083 (TAES). **San Jacinto Co.**: Sam Houston National Forest, Big Creek Scenic Area, 10 Oct 1998, DPL-6096 (F). **Tyler Co.**: Town Bluff, residence off FM 92, 29 May 1994, DPL-5206 (F).

**Lactarius caeruleitinctus** Murr. Found in mixed pine and hardwood forests.

Voucher specimen: **Newton Co.**: Bleakwood, 262 CR 3062, N 30° 42.509', W 93° 49.630', 30 August 1998, DPL-6071 (F); 1 Jun 2004, DPL-6874 (F).

**Lactarius gerardii** Peck. Found in hardwood forests.

Voucher specimens: **Hardin Co.**: Kountze, by Beaumont Creek, 12 Aug 1982, DPL-3293 (F). **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 28 Jun 2003, DPL-6727 (F); 17 Jun 1999, DPL-6187 (F); 23 Oct 2004, DPL-6983 (F).

**Tyler Co.**: Big Thicket National Preserve, Neches River Corridor Unit, Round Lake, 13 Sep 2003, DPL-6789 (F).

**Lactarius imperceptus** Beards. & Burl. Found in mixed pine and hardwoods.

Voucher specimens: **Angelina Co.**: Angelina National Forest, FR 313A, 2 Jan 2007, DPL-7811 (F). **Hardin Co.**: Big Thicket National Preserve, Jack Gore Baygall Unit, near FM 2937, 28 Oct 1979, DPL-2080 (F); Turkey Creek Unit, Kirby Nature Trail, 21 Dec 1982, DPL-3405 (F); Big Thicket National Preserve, Saratoga, Lance Rosier Unit, Teel Road, N 30° 15.629', W 94° 31.532', 11 Nov 2006, DPL-7672 (TAES). **Jasper Co.**: Buna, Temple-Inland Black Branch Hunting Club, road 2, off CR 701, off FM 1004, 5 Nov 1993, DPL-5096 (F); 13 Nov 1993, DPL-5116 (F). **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy 87, N 30° 42.509', W 93° 49.630', 1 Nov 1997, DPL-5964 (F); 9 Nov 1997, DPL-5969 (F); 18 Dec 2006, DPL-7781 (F); Mayflower, Canyon Rim Nature Trail, 31.06.927 N, 93.43.752 W, 18 Dec 2007, DPL-8415 (F). **Polk Co.**: Big Thicket National Preserve, Big Sandy Unit, Sunflower Road, 29 Nov 1985, DPL-3932 (F). **Tyler Co.**: Big Thicket National Preserve, Turkey Creek Unit, off FM 1943, 15 Dec 1979, DPL-2144 (F); Temple-Inland Forest Lake Experimental Forest, *Quercus nigra* test plot, 24 Nov 1995, DPL-5594 (F); Big Thicket National Preserve, Canyonlands Unit, N 30° 06.927', W 93° 43.752', 20 Dec 2007, Ovrebo 4720 (CSU) & DPL-8444 (F).

**Lactarius lignyotus** var. **canadensis** A.H. Smith & Hesler. Found in sphagnum moss bog.

Voucher specimen: **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy. 87, N 30° 42.509', W 93° 49.630', 27 Sep 2003, DPL-6824 (F).

**Lactarius peckii** Burl. Found in hardwood floodplain forests and with *Quercus alba*.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Jack Gore Baygall Unit, Timber Slough Road, 18 Jul 1981, DPL-2735 (F). **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy. 87, N 30° 42.509', W 93° 49.630', 16 Jul 1995, DPL-5518 (F); 19 Jun 1996, DPL-5641 (F); 29 Oct 1998, DPL-6115 (F). **Tyler Co.**: Big Thicket National Preserve, Turkey Creek Unit, off FM 1943, 9 Aug 1981, DPL-2778 (F); Temple-Inland Forest Lake Experimental Forest, *Quercus nigra* test plot, 13 Jun 1993, DPL-5011 (F); 22 Jun 1996, DPL-5651 (F); 7 Jun 1997, DPL-5788 (F); *Quercus alba* test plot, 30 May 1994, DPL-5225 (F); 22 Jul 1995, DPL-5550 (F); 7 Jun 1997, DPL-5787 (F).

## SEBACINALES

**Sebacina concrescens** (Schwein.) P. Roberts. Found in mixed pine and hardwood forests on a vine.

Voucher specimen: **Hardin Co.**: Big Thicket National Preserve, Saratoga, Lance Rosier Unit Teel Road, N 30° 15.629', W 94° 31.532', 19 Jul 2007, DPL-8114 (F).

## CORTICIALES

**Punctularia strigosozonata** (Schwein.) Talbot. Found on hardwood logs.

Voucher specimens: **Hardin Co.**: Big Thicket National Preserve, Turkey Creek Unit, Kirby Nature Trail, N 30° 27.738', W 94° 21.015', 14 Jun 2008, DPL-8670 (F). **Newton Co.**: Bleakwood, 262 CR 3062 & State Hwy. 87, N 30° 42.509', W 93° 49.630', 13 Jan 2008, DPL-8491 (F); Mayflower, Canyon Rim Nature Trail, N 31° 06.927', W 93° 43.752', 18 Dec 2007, DPL-8427 (F).

## ACKNOWLEDGMENTS

We thank the Big Thicket National Preserve for granting permission to collect in the Big Thicket. We are grateful to Scott Redhead, Ronald H. Petersen, and John McNeill for providing nomenclature assistance and advice; Roy E. Halling and The New York Botanical Garden for loaning the *Hygrophorus* type collections; Gastón Guzmán for confirming the identification of *Psilocybe caerulescens*; Sean Jones and Juan Luis Mata who assisted in various ways during the preparation of this manuscript; and Juan Luis Mata and Andrew Methven for reviewing the manuscript and providing helpful comments.

## REFERENCES

BESSETTE, A.E., W.C. ROODY, AND A.R. BESSETTE. 2000. North American boletes—a colored guide to the fleshy pored mushrooms. Syracuse University Press, New York.

BESSETTE, A.E., W.C. ROODY, A.R. BESSETTE, AND D.L. DUNAWAY. 2007. Mushrooms of the southeastern United States. Syracuse University Press, New York.

CIBULA, W.G. 1979. Fungi of the Gulf Coast I. Two new species of *Hygrophorus* section *Hygrocybe*. Mycotaxon 10:105–115.

HORN, B., R. KAY, AND D. ABEL. 1993. A guide to Kansas mushrooms. University Press of Kansas, Lawrence.

LEWIS, D.P. AND W.G. CIBULA. 2000. Studies on Gulf Coast agarics (Basidiomycota: Agaricaceae); notes on some interesting and rare species. *Texas J. Sci.* 52 (Suppl):65-78.

LINCOFF, G. 1981. Audubon field guide to North American mushrooms. Alfred Knopf, New York.

MATHENY, P.B. (AND 24 OTHERS). 2006. Major clades of Agaricales: a multilocus phylogenetic overview. *Mycologia* 98:982-995.

MCNEILL, J., F.R. BARRIE, V. DEMOULIN, D.L. HAWKSWORTH, K. MARHOLD, D.H. NICOLSON, J. PRADO, P.C. SILVA, J.E. SCOG, J.H. WIERSEMA, AND N.J. TURLAND, eds. 2006. International code of botanical nomenclature (Vienna Code). Gantner Verlag, Rugell, Liechtenstein.

METZLER, S. AND V. METZLER. 1992. Texas mushrooms. University of Texas Press, Austin.

PHILLIPS, R. 2005. Mushrooms and other fungi of North America. Firefly Books, Ltd., Buffalo, New York.

SINGER, R. 1986. Agaricales in modern taxonomy. 4<sup>th</sup> ed. Koeltz Scientific Books, Koenigstein.

WEBER, N.S. AND A.H. SMITH. 1985. A field guide to southern mushrooms. University of Michigan Press, Ann Arbor.